Claim Amendments

Please amend claims 1-7, 9-11, 13-14, 17 and 19 as follows.

Please cancel claims 8 and 18.

Please add new claims 21 and 22 as follows.

1. (currently amended) A temperature-sensing wafer position detection system [[,]] for carrying out a wafer baking process comprising:

a bake plate having a temperature-sensing apparatus for monitoring a change in temperature of said bake plate heating surface upon placement of a wafer [[on]] in proximity to said bake plate heating surface; [[and]]

a microprocessor ~~operably connected to~~ in signal communication with said temperature-sensing apparatus for receiving a temperature data signal from said temperature-sensing apparatus to determine a temperature change over time of said bake plate heating surface~~; and aborting operation of said bake plate when said change in temperature of said bake plate falls below a threshold value in a specified time interval~~.

2. (currently amended) The system of claim 1 wherein said temperature-sensing apparatus comprises a plurality of pyrometers ~~engaging~~ arranged for sensing a temperature of said bake plate heating surface.

3. (currently amended) The system of claim 1 further comprising ~~an annular~~ a base carried by said bake plate heating surface and a wafer guide extending upwardly from said base for guiding [[a]] said wafer onto said base to define a heating space between said bake plate heating surface and said wafer.

4. (currently amended) The system of claim 3 wherein said temperature-sensing apparatus comprises a plurality of pyrometers ~~engaging said bake plate~~ arranged for sensing a temperature of said bake plate heating surface portion underlying said wafer.

5. (currently amended) The system of claim 1 wherein said bake plate heating surface comprises ~~a plate body having a heating surface and~~ a base ~~carried by~~ on said heating surface for supporting [[the]] said wafer in spaced-apart relationship to said heating surface.

6. (currently amended) The system of claim 5 further comprising a wafer guide ~~carried by~~ on said base for guiding [[the]] said wafer onto said base.

7. (currently amended) The system of claim [[5]] 1 wherein said temperature-sensing apparatus comprises a plurality of pyrometers extending through [[said]] a plate body to said bake plate heating surface for sensing a temperature of said base plate heating surface ~~and wherein said microprocessor is operably connected to said plurality of pyrometers~~.

8. (cancelled)

9. (currently amended) A temperature-sensing wafer position detection system[[,]] for carrying out a wafer baking process comprising:

a bake plate having a temperature-sensing apparatus ~~operably engaging~~ comprising temperature sensors in proximity to said bake plate heating surface for monitoring a change in temperature of said bake plate heating surface upon placement of a wafer in spaced apart relationship to [[on]] said bake plate heating surface to define a heating space;

a controller ~~operably connected to~~ in signal communication with said bake plate for ~~operating~~ controlling said ~~bake plate~~ wafer baking process in response to said detected wafer position; and,

a microprocessor ~~operably connected to~~ in signal communication with said temperature-sensing apparatus for receiving a temperature data signal from said temperature-sensing apparatus, said microprocessor programmed for determining a temperature change over time of said bake plate heating surface to detect said wafer position[[,]];

said microprocessor ~~operably connected to~~ further in signal communication with said controller for ~~aborting operation of said bake plate through said controller when said change in temperature of said bake plate falls below a threshold value in a specified time interval~~ sending a signal to said controller in response to said temperature change to control said wafer baking process.

10. (currently amended) The system of claim 9 wherein said bake plate heating surface comprises ~~a plate body having a heating surface and~~ a base carried by said heating surface for supporting the wafer in spaced-apart relationship to said heating surface.

11. (currently amended) The system of claim 9 [[10]] wherein said ~~temperature-sensing apparatus~~ temperature sensors comprises a plurality of pyrometers ~~extending through said plate body~~ in proximity to said heating surface.

12. (original) The system of claim 10 further comprising a wafer guide carried by said base for guiding the wafer onto said base.

13. (currently amended) A method of sensing a position of a wafer on a bake plate to improve a wafer baking process, comprising:

setting said bake plate heating surface at about a temperature set point [[for]] prior to carrying out [[a]] said wafer baking process;

placing said wafer [[on]] in proximity to said bake plate heating surface;

~~measuring~~ then determining a change in temperature of said bake plate heating surface over a specified time interval according to temperature sensors;

then determining ~~whether said wafer is properly positioned on~~ said wafer position with respect to said bake plate heating surface ~~based on~~ in response to said change in temperature ~~over said specified time interval~~; and,

~~aborting said baking process in the event that said wafer is improperly positioned on said bake plate~~

determining a subsequent process step in response to said wafer position selected from the group consisting of aborting said wafer baking process and proceeding with said wafer baking process.

14. (currently amended) The method of claim 13 wherein [[said]] the step of determining ~~whether~~ said wafer position comprises determining said wafer is properly positioned ~~on said bake plate comprises determining that said wafer is properly positioned on said bake plate when~~ wherein said change in temperature is at least as great as a predetermined threshold value for said change in temperature ~~over said specified time interval~~.

15. (original) The method of claim 14 wherein said threshold value is one percent of said set point temperature.

16. (original) The method of claim 15 wherein said specified time interval is 10 seconds.

17. (currently amended) The method of claim 13 wherein [[said]] the step of determining ~~whether~~ said wafer position comprises determining said wafer is properly positioned ~~on said bake plate comprises determining that said wafer is improperly positioned on said bake plate when~~ wherein said change in temperature is less than a predetermined threshold value for said change in temperature ~~over said specified time interval~~.

18. (cancelled)

19. (currently amended) The method of claim [[18]] 17 wherein said threshold value is one percent of said set point temperature.

20. (original) The method of claim 19 wherein said specified time interval is 10 seconds.

21. (new) The method of claim 17, wherein said change in temperature is greater for an acceptable wafer position relative to an unacceptable wafer position.

22. (new) The system of claim 1, further comprising a controller in signal communication with said microprocessor for controlling said wafer baking process in response to said temperature change.